

Consultant work product. Not reviewed by Delta Stewardship Council.

# Changes in Staff Draft Delta Plans

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Consultant work product. Not reviewed or approved by Delta Stewardship Council. This work product is focused solely on the development of the staff draft Delta Plans. It has no relationship to the EIR processes nor were the Draft EIR or any comments on that draft reviewed for this analysis.

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## CHANGES IN STAFF DRAFT DELTA PLANS

### 1. OVERVIEW

Changes in the five staff draft Delta Plans prepared in 2011 are analyzed here. The analysis focuses on the policies, recommendations and performance measures as the “operational” elements of the Delta Plan. Policies have regulatory impacts, recommendations identify actions encouraged by the Delta Stewardship Council and the performance measures both provide accountability in meeting Delta Plan goals and the foundation for required revisions to the Delta Plan. The analysis has two goals: (a) an accurate rendering of the main features of the staff draft Delta Plans and how they evolved over time; and (b) analysis of how the major themes expressed in comments on the five staff drafts were reflected in the development of the staff draft documents.

The staff draft plans include extensive text and numerous tables and graphics beyond the policies, recommendations and performance measures. These receive some attention in this analysis, especially in regard to (a) how issues are framed for Council consideration in the staff draft Delta Plans and (b) a few instances of apparent conflict between the text and policies, recommendations or performance measures. Writing a complex document intended to establish policies and to have regulatory effects, while being intelligible and useful to multiple audiences, faces large challenges. Limited attention is also given to the length, structure and coherence of the five staff drafts.

Noting a few attributes of the five staff draft Delta Plans provides useful information with which to begin.

This analysis is based solely on the written record of posted staff draft Delta Plans and of comments received by the Delta Stewardship Council and posted to its website. No review of video records of Council meetings has been undertaken, nor have Council Members or staff been interviewed regarding how the staff draft Plans were developed. The authors serve as consultants to the Delta Plan project through CH2MHill, but their participation in developing the Delta Plan ended part way through developing the third staff draft so they have no personal knowledge of how the third through fifth staff drafts were developed.

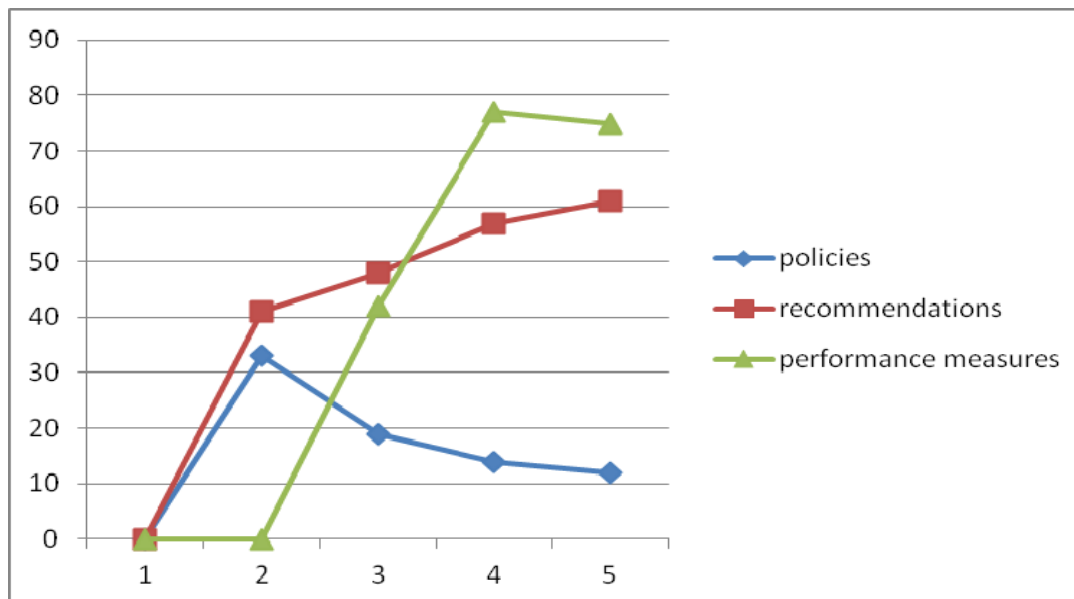
This report is intended to serve as the entry point for discussion with the Council staff, Council members and any others as appropriate. This analysis does not include review of comments suggesting correction of errors or failures in “facts” or suggestions of “edits” to improve clarity.

First, the staff draft Delta Plans lengthened over time, becoming substantial documents:

Staff Draft Delta Plan Number:	Total pages (with appendices added)
1	52
2	62
3	119 (131)
4	174 (240)
5	225 (468)

Second, while there were no policies, recommendations or performance measures in the first staff draft, the number of policies peaked in the second staff draft, while the number of recommendations rose modestly in the third staff draft (as seen below, some policies became recommendations) and continued to increase in the fourth and fifth staff drafts, while performance measures were first provided in the third staff draft, nearly doubled in the fourth staff draft and then declined modestly in the fifth staff draft. Figure 1 shows these trends.

Figure 1. Numbers of policies, recommendations and performance measures in each of the five staff drafts.



Third, the staff draft Delta Plans are organized into nine chapters, the number, topics and order of which have not changed since being adopted in the third staff draft Delta Plan. An Executive Summary precedes the first chapter in the fourth staff draft and an expanded version of this material is labeled a Preface in the fifth staff draft. Table 1 below reports the numbers of policies, recommendations and performance measures in each chapter of the five staff draft Delta Plans. As noted near the bottom of the table, the first two staff draft Delta Plans had more chapters and the first staff draft had a different chapter order. Both the first and second staff draft plans included a chapter entitled “Delta Plan: Integration of Policies, Performance Measures and Targets, and Adaptive Management” but provided nothing beyond a title and chapter title page, with the notation that it was under development. Acknowledging the challenges in writing an effective chapter satisfying the expectations of this chapter title, several commentators noted that the fifth staff draft Delta Plan would be improved by more effective integration across chapters (e.g., ACWA, September 30, 2011, page 3; Delta Independent Science Board, September 16, 2011, page 2). The fifth staff draft Delta Plan includes performance measures for five of its eight substantive chapters but no performance measures for chapters on science and adaptive management (chapter 2), governance (chapter 3), or finance (chapter 4). The fifth staff draft Delta Plan also includes targets with dates for many “administrative” and also for a few “outcome” performance measures, but often without dates and stated only as making “progress.”

Table 1. Policies, Recommendations and Performance Measures in Staff Draft Delta Plans

Ch. #	Topic; # policies, recommendations and performance measures	Staff Draft Delta Plan, number:					comment re staff draft # 5
		1	2	3	4	5	
<b>2</b>	<b>Science and Adaptive Management</b>						
	<i>policies</i>	0	0	0	0	0	
	<i>recommendations</i>	0	0	0	0	0	
	<i>performance measures</i>	0	0	0	0	0	
<b>3</b>	<b>Governance</b>						
	<i>policies</i>	0	10	1	1	1	
	<i>recommendations</i>	0	2	0	0	0	
	<i>performance measures</i>	0	0	0	0	0	
<b>4</b>	<b>Water Supply Reliability</b>						
	<i>policies</i>	0	8	5	4	2	ER P1 too

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	<i>recommendations</i>	0	3	8	10	13	ER R8 too
	<i>performance measures</i>	0	0	6	24	25	
<b>5</b>	<b>Ecosystem Restoration</b>						
	<i>policies</i>	0	6	6	5	5	
	<i>recommendations</i>	0	5	5	8	8	
	<i>performance measures</i>	0	0	18	17	17	
<b>6</b>	<b>Water Quality</b>						
	<i>policies</i>	0	1	see WR P4	see ER P1	see ER P1	
	<i>recommendations</i>	0	8	9	9	10	
	<i>performance measures</i>	0	0	6	20	18	
<b>7</b>	<b>Reduce Risk</b>						
	<i>policies</i>	0	6	6	4	4	
	<i>recommendations</i>	0	7	8	9	12	
	<i>performance measures</i>	0	0	5	7	7	
<b>8</b>	<b>Delta as an Evolving Place</b>						
	<i>policies</i>	0	2	1	0	0	
	<i>recommendations</i>	0	3	7	9	6	see FP R10,FP R11, ER R5
	<i>performance measures</i>	0	0	7	9	8	
<b>9</b>	<b>Finance</b>						
	<i>policies</i>	0	0	0	0	0	
	<i>recommendations</i>	0	13	11	12	13	see ER R3
	<i>performance measures</i>	0	0	0	0	0	

**NOTE:** The first staff draft included 12 chapters and the second staff draft included 10 chapters. "Delta Plan: Integration of Policies, Performance Measures and Targets, and Adaptive Management" was identified as chapter 12 in the first staff draft and as Chapter 10 in the second staff draft, but no content provided.

<b>Totals</b>	<i>policies</i>	0	33	19	14	12	
	<i>recommendations</i>	0	41	48	57	62	
	<i>performance measures</i>	0	0	42	77	75	

Fourth, the chapters differ in use and numbers of policies, recommendations and performance measures. For example, the five staff drafts of Chapter 2 “Science and Adaptive Management” have never included a policy, recommendation or performance measure. No performance measure has been proposed for the chapter on governance or the chapter on finance. The chapters on water quality (6) and Delta as an evolving place (8) included policies in the second (both) or third (not water quality) staff Drafts, but have none in the fourth or fifth staff drafts. Note that chapter 6, on water quality, incorporates policies from other chapters since the third staff draft and that chapter 4, a more reliable water supply, incorporated ER P1 and ER R8, while chapter 8, Delta as a place, and chapter 9, finance, include references to recommendations in other chapters. These linkages could suggest integration across the chapters. Such cross referencing may also have the effect of shifting the burden of a policy’s rationale and support to the chapter that contains it.

Fifth, the patterns in Figure 1 and Table 1 suggest that large changes in the staff drafts took place between the first and second and second and third iterations. These are the occasions with the largest numerical changes in the staff draft Delta Plan but analysis of the substantive changes is required to determine how the staff draft Delta Plans evolved and to understand the potential role of comments shaping the various staff drafts.

An analysis of the staff draft Delta Plans, organized by chapters, follows.

## 2. CHAPTER ANALYSES

### Chapter 2. Science and Adaptive Management for a Changing Delta

This chapter stands on its own and is distinctly different from Chapters 4-8 in that it provides general guidance without implementation via policies, recommendations, or performance measures. Also, in comparison to other chapters it is more of an advanced guidance manual than a governing document.

The most significant comments were directed not at the content of the chapter itself, but to the issue of its ideas not being incorporated in the Plan and the Council’s decision making structure.

“The description of the adaptive management process in Chapter 2 is one of the best and most detailed we have seen in any Delta planning document. The outstanding question is: When will this process be applied to the development of the Delta Plan itself?” (EWC\_032411 pg.2)

This concern is echoed by another environmental organization:

“This section [Pg. 22] correctly identifies the steps necessary for an adequate plan: a) define/redefine the problem; b) establish goals and objectives; c) model linkages between objectives and proposed action(s); and d) select action(s): research, pilot, or full-scale (p. 22).

Unfortunately, the draft Plan does not take its own advice. The draft appears to suggest that other plans be subject to a consistency determination of meeting these steps while exempting itself from doing so. It consistently confuses the very broad narrative goals of the Delta Reform Act (unfortunately described as objectives in the legislative language) with clear, specific, measurable objectives as used in Chapter 2, and defers the establishment of thresholds for success to the subsequent and derivative step of developing performance metrics".  
(Env\_Coalition\_042811 pg5)

By the time the fifth draft was being reviewed, the Delta Independent Science Board analysis had been published, and commentators other than environmental groups expressed concerns:

"We agree [with Delta Independent Science Board] and would recommend that the Adaptive Management Framework provide a more detailed discussion of how adaptive management would actually occur in the context of the Plan and provide those examples within the Plan."  
(GCID\_093011 pg.2)

Environmental groups became more forceful in comments on later drafts:

"The adaptive management program outlined in the Delta Plan, while promising to [be] incorporated science into the decision making process, is little more than window-dressing facilitating business-as-usual." (Env\_Coalition\_093011 pg12)

"We therefore fully concur with the Delta Independent Science Board (DISB) recommendations that the principles of adaptive management must be applied in Chapters 4 through 8. These chapters must describe and demonstrate how adaptive techniques can be integrated into the actions proposed for the Delta Plan. Failure to do so would be a major oversight and, as indicated by the DISB, would undermine the legislative mandate for the co-equal goals". (Env\_Coalition\_093011 pg12)

Also raised was the challenge the Council will face in its application of Chapter 2's science and adaptive management to its consideration of BDCP.

"The panel convened by the National Research Council of the National Academies, in their 2011 evaluation of BDCP titled *A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan*, observes that most adaptive management efforts worldwide have failed primarily without the agreement of the water users. The failure to define and quantify critical goals and inclusion of agreements that limit requirements on water users undermine and sabotage the very concept of adaptive management because of institutional problems that include lack of resources necessary for expanded monitoring, unwillingness of decision makers to admit and embrace uncertainties in making policy choices and lack of leadership implementation. The aims of adaptive management often conflict with institutional and political preferences. This is especially important, given the lack of definition of water



supply reliability and ecosystem restoration in the Delta Plan and the inherent contradiction between restoration of the estuary and requirements in the BDCP Planning Agreement that provide assurances that no additional restrictions on the use of land, water, or financial resources beyond agreed-on amounts will be required”. (Env\_Coalition\_093011 pg13)

The following comment on the fifth draft comes the closest of any received to laying down a gauntlet on this issue:

“While the Delta Reform Act provides broad narrative goals for the Delta Plan, it does not provide clear, specific, and measurable objectives as called for in this Chapter. The Delta Plan must not defer this next necessary step of Adaptive Management. The Plan must begin to establish clear and measurable goals, objectives, and performance measures; it must quantify goals and provide specific accomplishment dates; it must model linkages between objectives and proposed actions; it must select and evaluate actions for implementation; it must design implementation actions with appropriate monitoring; and it must be peer reviewed. If the plan cannot be enforced, it is illegal” [under CEQA]. (Env\_Coalition\_093011 pg13)

These concerns, when coupled with the recommendations of the Delta Independent Science Board, would appear to call for serious consideration in the development of the next draft Plan.

### **Chapter 3. Governance: Implementation of the Delta Plan**

As seen above, this chapter included 10 policies and two recommendations in the second staff draft, reduced to a single policy and no recommendations in the third, fourth and fifth staff draft Delta Plans. Importantly, the core responsibility of the Council to develop a Delta Plan with regulatory elements remains, the geographical scope of the Delta Plan did not change and the key steps by which the Council will implement the covered actions/consistency determination processes are in place.

The intense focus and conflict regarding the authority of the Council and how it would be exercised is not surprising and first arose in focused manner when the Council considered and adopted administrative procedures governing appeals, statutory provisions requiring other consistency reviews, and other forms of review or evaluation by the Council, regulations adopted September 23, 2010. The Council received multiple written comments and much testimony during development of these regulations which spanned several Council meetings. Of course, that round of conflicts re the authority of the Council was only a replay of conflicts in the legislature while debating the Delta Reform Act of 2009, in the two year Delta Vision process, and in decades of water resources and ecosystem protection policy making in California. Crafting a Delta Plan added a large additional dimension of conflict over the authority of the Council as it could directly impact land uses in the Delta and, less directly, in areas outside of the Delta.

Moreover, many participants in these policy arenas have very large economic stakes in the results and many are well organized to advance their interests through comments and other means. Additionally, the legacies of prior conflicts favor particular ways of framing issues and elevate particular policy choices to large, even iconic positions. Water conveyance across regions, endangered species, land use and economic growth are examples of such issues and associated policies touched by the Delta Reform Act of 2009. The Act cannot be implemented without engaging these issues, and the ensuing conflicts center most fundamentally on the authority, responsibilities and powers of the Delta Stewardship Council to develop and implement a Delta Plan.

The 10 policies regarding governance (chapter 3) in the second staff draft Delta Plan sought to achieve three broad objectives:

- Obtain information on the proposed covered action in terms relevant to the authority of the Council. GP P1 provided guidance regarding the information required, provisions for implementation, provisions for adaptive management, and information on the economics and financing of covered actions with a value above \$10 million.
- Establish transparent policies by which the Council would assess covered actions. GP P2 through GP P9 enumerated these policies, including, as examples, making progress on coequal goals in the same time frames (GP P2), a preference for publicly available and verifiable data and analyses (GP P6), and consideration of whether a covered action covers multiple objectives and works effectively with other measures (GP P8).
- Establish policies regarding adaptive management review and revision of the Delta Plan. GP P10 laid out four phases for adaptive management.

Specific citations to the Delta Reform Act identified authority for these policies and examples of virtually all can be found in the current actions of the California state agencies and local governments that will be identifying covered actions and filing consistency certifications. However, the list of policies is long and the second staff draft Delta Plan did not seek to clarify what activities would be excluded from consideration as covered actions under the Act, exciting concern among interests which feared a very broad interpretation.

The two recommendations included creation of a regional benefit assessment flood management agency (GP R1) and extension of the geographical responsibilities of the Delta Protection Commission and the Delta Conservancy to match the definition of the Delta provided in the Delta Reform Act at Water Code section 85058 (including the legal Delta and Suisun Marsh) (GP R2).

Four themes have dominated comments received on governance and have been essentially consistent through all the work of the Council (references provided to the themes identified in Major Themes in Comments on Staff Drafts of Delta Plan, November 8, 2011):

1. The Council has narrowly limited authority (ACWA: 1, 3; Agriculture (out of Delta): 1; Delta water users and land owners: 2; Delta water export users/interests other than MWD service area: 1; MWD: 2)
2. Existing policies and the arenas in which those policies are made should not change (Delta local governments: 2, 4; Delta water users and Delta land owners: 1; DFG: 3; DWR: 1; federal government agencies: 1; Regional Council of Rural Counties: 1, 2; Delta water export users/interests other than MWD service area: 3; MWD: 1, 2; State and Federal Contractors Water Agency: 1, 2)
3. Meeting the requirements for consistency review of covered actions is costly and introduces uncertainty in critical decisions (Agriculture (in the Delta): 2; Delta local governments: 2, 3; Delta water users and land owners: 3)
4. The Delta Plan could address specified issues (variously defined by the interest making the comment): Coalition for a Sustainable Delta: 1; Contra Costa Water District: 1, 3; Delta local governments: 6;

The negative comments received on this chapter in the second staff draft Delta Plan focused mostly on policies GP P1 through GP P9, critiquing the policies as either exceeding the Council authority, intruding on the decision making of another agency or as costly, the first three themes above. While some of the comments identified specific dimensions of the policies found to be objectionable, the main message was that this total package of policies was onerous and not appropriate.

Chapter 3 (Governance) of the third staff draft Delta Plan is a major revision. Importantly, it includes both text and a graphic clarifying what is or is not a covered action. That discussion was expanded and refined in the fourth and fifth staff drafts. For example, three “administrative” exemptions to covered action status were included in the fourth staff draft and continued in the fifth staff draft, further narrowing the set of potential covered actions from those which do not meet the basic definition or are exempted under the Delta Reform Act of 2009 statute.

The third staff draft included a single policy and no recommendations, and the fourth and fifth staff drafts similarly contained only a single policy and no recommendations. As noted earlier, no staff draft of this chapter included any performance measures. The four policies dropped completely between the second and third drafts addressed consideration of a covered action broadly or encouraged integration: GP P2 called for “linked” progress on the coequal goals, GP P3 called for consideration of all eight policy objectives enumerated in Water Code section 85020, GP P8 had the Council assessing whether a covered action met multiple objectives and included implementation measures that worked together, and GP P9 asked for identification of the allocation of costs and risks of a covered action.

Elements of policies GP P1, P4, P5, P6 and P10 were incorporated into the single governance policy included in the third staff draft but some were further reduced or dropped in the fourth or fifth staff drafts. In general, the policies that remained were narrowed in application in the fourth draft, though

some expansion occurs in the fifth draft. For example, GP P1 of the second staff draft included a detailed list of information to be submitted with a consistency finding. That is reduced in the third draft to “disclosing all potentially significant adverse environmental impacts and mitigations of those adverse impacts,” language continued in the fourth and fifth staff drafts. GP P5 regarding use of best available science became a single sentence with the notation “Council to discuss further” in the third staff draft and made conditional with the wording “as relevant to the purpose and nature of the project” in the fourth and fifth staff drafts.

The fifth staff draft broadens the single policy, including language seeking both a broad assessment of how a covered action impacts the coequal goals and recognition of potential for a covered action to impact different policies contained in the Delta Plan:

*“A covered action must be consistent with the coequal goals and the inherent objectives. In addition, a covered action must be consistent with each of the policies contained in this Plan implicated by the covered action. The Delta Stewardship Council acknowledges that in some cases, based upon the nature of the covered action, full consistency with all relevant policies may not be feasible. In those cases, covered action proponents must clearly identify areas where consistency is not feasible, explain the reasons, and describe how the covered action nevertheless, on whole, is consistent with the coequal goals and the inherent objectives. In those cases, the Delta Stewardship Council may determine, on appeal, that the covered action is consistent with the Delta Plan. “*

Additionally, GP P1 of the fifth staff draft returns to a requirement that a covered action comply with applicable law, included in the second staff draft as part of GP P1, but omitted in the third and fourth staff drafts. The new language is broad: *All covered action proponents shall certify that the covered action shall comply at all times with existing applicable law.*

The first recommendation in the second staff draft, regarding creation of a regional flood management benefit assessment agency for the Delta was carried forward in the third through fifth staff drafts, seen in recommendations in both the risk reduction and finance plan chapters, ending up in the fifth staff draft as RR R9 and FP R2. The second recommendation, to expand the boundaries of the Delta Protection Commission and the Delta Conservancy to match those of the Council, was dropped in the third staff draft and did not reappear.

While the important changes occurred in the staff drafts regarding governance, it is very important to also note what remains, despite strong comments urging change:

- the core responsibility of the Council to develop a Delta Plan with regulatory elements remains
- the geographical scope of the Delta Plan did not change
- the key steps by which the Council will implement the covered actions/consistency determination processes are in place

It is not evident that the changes made in the staff drafts are responsive to a particular set of comments received by the Council. A plausible interpretation from the written record is that the steps to simplify processes and to somewhat narrow the application of the covered actions/consistency review were taken in response to the general thrust of many comments, rather than to the specifics of comments from any group or single commentator.

#### **Chapter 4. A More Reliable Water Supply for California**

As seen above, this chapter included eight policies and three recommendations in the second staff draft, reduced to five, four and then two policies in the third, fourth and fifth staff drafts respectively. Recommendations increased to eight, then 10 and finally 12 in the third, fourth and fifth staff draft Delta Plans. The second staff draft included no performance measures but the third draft included six, which quadrupled to 24 in the fourth draft and increased modestly to 25 in the fifth staff draft.

In the fifth staff draft, the Council retains core responsibilities to make policies in the Delta Plan seeking water supply reliability and the Council makes recommendations central to the long term capacity to effectively manage California's water resources, including dates for completion of actions that could spur faster action and could provide the basis for policies in a future Delta Plan or legislative action, but it is also important to note that all policies and recommendations regarding a more reliable water supply for California rely on existing or revised state policies and programs which are the responsibility of, and at the discretion of other agencies. Reliance on actions of other agencies is very evident in this chapter.

The changes made in this chapter are complex and slight changes in wording can have substantial impacts. This analysis focuses on what appear to be the changes with major effects. As seen earlier, introduction of policies and recommendations in the second staff draft constituted a major change and those policies and recommendations then underwent still further changes in the third staff draft. As in the governance chapter, the policies included in the second draft version of this chapter were detailed and were premised on the Delta Reform Act of 2009 establishing substantial scope of Council authority and responsibility regarding "...providing a more reliable water supply for California.."

Three policies in this chapter illustrate the approach in the second staff draft:

- WR P1 focused on water flow standards, setting a schedule for SWRCB action including "By January 2, 2014, adopt public trust flow standards for the Delta... ." and "By January 2, 2018, adopt public trust flow standards for the Delta watershed... ."
- WR P2 titled "Regional Water Self-Sufficiency" stated: "... all water agencies within the study area of the Delta Plan shall develop and implement a plan... no later than January 1, 2015... ." Seven key elements of this plan were identified and specific guidance given, including: planning for possible interruption of Delta Water Supply, Water Use Efficiency, Water Recycling, A

Sustainable Water Supply (including regional water balance expectations), Use of Currently Non-Potable Groundwater, Storm Water Capture and Recharge, and Seawater Desalination.

- WR P4 required transparency in developing all future State Water Project water supply contracts, including requirements regarding information about water supplied in different water years, capital costs and annual operations and maintenance costs.

Comments on these policies from water agencies reliant on exports were largely negative, consistent with these themes identified in our report of November 8, 2011:

- The staff draft Delta Plans do not provide a coherent plan, are not based in good science and depend too much on regulating water flows. (ACWA)
- The Delta Plan should not negatively impact the operations and contracting processes of the Department of Water Resources (DWR). (DWR)
- The Delta Plan should reconcile interests regarding flows, recognizing that the existing flow regime has evolved to meet multiple objectives simultaneously.(NCWA)
- The Delta Plan should adhere to the (narrow) authority of the 2009 Act. (Delta water export users other than MWD service area)
- Focus on areas of clear authority for the Delta Plan and work with other agencies and policies whenever possible. (MWD)
- Policy autonomy for water agencies.(SFCWA)

The third staff draft included major revisions, including reducing the number of policies to five, removing particular language that had received negative comments and reducing and/or simplifying detailed guidance. A prefatory statement regarding the new WR P1 through P3 sought to clarify and narrow the application of these policies as regulations, making them recommendations otherwise. As examples of specific changes to policies, WP P3 (water use reports), WR P6 (protect conveyance alignments), and WR P7 (surface storage investigations) were largely dropped as policies (some water use information reporting is inherent in analyzing regional water balance, carried forward in WR P1 of the third staff draft) or became recommendations (water storage is addressed in WR R4, expanded to include groundwater, for example). WR P1 regarding SWRCB setting flow standards became WR P4, without specific reference to public trust flows and modestly extended time deadlines.

The fourth staff draft continues this process of clarification, narrowing of scope and simplification, resulting in four policies and 10 recommendations, plus, as noted above, a large increase in performance measures. Importantly, reference to flow standards was removed as a policy in this chapter and instead reference is made to the flow standards policy in Chapter 5 on Ecosystem Restoration, ER P1. WR P1 and WR P2 flipped focus between the third and fourth staff drafts, with WR P1 becoming the requirement to meet existing state laws that was previously in WR P2 and WR P2, requiring a new “Water Supply

Reliability” element in Urban or Agricultural Water Management Plans. The recommendations advanced in the fourth staff draft largely build on existing public policy processes of relevance to achieving more reliable water supply in the long term, including the important issues of incentives for water conservation (WR R2), water storage (WR R4 and WR R5), groundwater (WR R6 through R8) and improved information (WR R9 and WR R10).

The performance measures proposed in the fourth staff draft are grouped as “administrative,” “driver,” or “outcome” performance measures which correspond to many of the policies and recommendations in the chapter. Four of the 12 administrative performance measures have dates for completion and can be considered targets. All seven of the driver performance measures and four of the outcome performance measures seek “progress” on the performance measure. The exception to this pattern is seen in the recommendation that Water Plan Update every five years consolidate and summarize “...actual data on the status of the State’s water supplies, demands, and water balances (by hydrologic region” without reference to either progress or a target date.

The fifth staff draft saw further change in this chapter, which now contains only two policies, but thirteen recommendations (including two numbered “WP R8”) and an additional performance measure. The remaining policies include WR P1, focused on (a) compliance with existing state law regarding plans for water management, including a “water reliability element” in those plans which is to identify “...specific programs and projects that will be implemented over a 20-year planning period...consistent with the coequal goals and will contribute to improved regional self-reliance and reduced reliance on the Delta...,” evaluation of regional water balance and conservation-oriented rate structure (by 2020). WR P2 requires all new contracts and water transfer agreements of more than one year duration to meet adopted DWR or USBR transparency policies. Instead of just referring to the ecosystem restoration policy regarding setting water flow standards (ER P1), it is repeated in this chapter introduced by a paragraph that establishes the importance of these standards for effective water policy.

The recommendations included in the fifth staff draft include significant changes from those of the fourth draft, including two new recommendations, WR R2, regarding actual data as a basis for the California Water Plan updates and the first WR R8 (at page 87), calling for completion of the BDCP process by 12.31.14. WR R12 is a simplified call for language to insert in contract renewals under the State Water Project, focused on compliance with WR P1.

Considering all the changes in these staff drafts, much the same conclusions can be reached as noted in regard to governance. While the important changes occurred in the staff drafts, it is very important to also note what remains, despite strong comments urging change:

- the core responsibility of the Council to make policies in the Delta Plan seeking water supply reliability remains

- the Council makes recommendations central to the long term capacity to effectively manage California's water resources, including dates for completion of actions that could spur faster action and could provide the basis for policies in a future Delta Plan or legislative action

However, it is also important to note that all policies and recommendations regarding a more reliable water supply for California included in the fifth staff draft Delta Plan rely on existing or revised state policies and programs which are the responsibility of, and at the discretion of other agencies. That is allowable within the authority granted the Council, but the reliance on actions of other agencies is very evident in this chapter.

As in the governance chapter, it is not clear that the changes made in the staff drafts are responsive to a particular set of comments received by the Council. A plausible interpretation from the written record is that the steps made were taken in response to the general thrust of many comments, rather than to the specifics of comments from any group or single commentator.

## **Chapter 5 Restore the Delta Ecosystem**

Policies on ecosystem restoration will be essential to achievement of the co-equal goals; thus the ecosystem chapter is a critical element of the Delta Plan. As the staff drafts evolved, shifts in language reduced the Council's direct role in habitat protection, and limited the Plan's geographic coverage of flood-prone areas that are relevant to both risk reduction and habitat restoration.

This analysis will address three key features:

### **Protection and management of areas necessary to future habitat restoration**

Restoration, especially for tidal marsh and river-related habitat, will necessarily take place over a very long time span. During that time, suitable areas will be subject to changes in land use, and be affected by climate change and sea-level rise; all of which will determine the location and extent of lands available for restoration at appropriate locations and elevations.

The second staff d's ER P1 addressed this issue by stating: "Covered actions that have ecosystem implications shall demonstrate that impacts ... have been fully considered and avoided or minimized...." Further, "CEQA documentation ...shall consider the [associated] habitat values".

The third through fifth staff drafts continued these considerations in ER P2 which dealt with restoration projects, and ER P3, dealing with actions other than restoration per se. The third staff draft added that the Council's determinations of consistency will consider habitat values; but this provision was amended in staff drafts four and five. The fourth staff draft clarifies that the policy covers local and regional land use plans. The fifth staff draft continues this coverage, but exempts incorporated cities and their spheres, and certain designated areas: the Clarksburg growth boundary, the Contra Costa County urban limit line, and the Mountain House General Plan Community Boundary. These exemptions appear to be



in direct response to language offered by CBIA (093011). For covered actions other than habitat restoration (including local plans) and outside of exempted areas, Staff Draft 5 adds a requirement to consult with the CA Department of Fish & Game to demonstrate avoidance or minimization of disruption to areas designated as suitable for habitat restoration (ER P3).

The thrust of this policy stream has been to hold close to the original concept, with some clarification but substantial narrowing of application. The exemption of spheres of influence represents a significant change between staff drafts four and five, in that the spheres contain agricultural land flood risk zones and floodplain habitat. DWR notes:

“Once urban areas in the Secondary Zone achieve a 200-year level of protection, which is what the Central Valley Flood Protection Plan is striving for, and the economy improves, we can expect that spheres of influence would, in fact, undergo new development in accordance with existing plans. This is particularly true for Tracy, Lathrop and Stockton.” (DWR 093011)

What also remains unclear is the degree to which areas in the central and peripheral Delta will remain available for restoration given the types of residential development permitted in Chapter 7 and the economic and agricultural development envisioned by the DPC and local governments.

### **Floodplains**

In staff draft three, ER P4 contained provisions to protect wide areas of floodplains important to both ecosystem and flood protection. ER P4 also required that all covered actions demonstrate that they would maintain or expand large blocks of habitat (in line with the Act’s reference to habitat corridors and interconnected habitat). This language was omitted from staff drafts four and five.

The thrust of this policy stream when coupled with Chapter 7’s dropping reference to wide floodplains in favor of more narrowly delineated floodplains and designated floodways, is a significant reduction of policy coverage.

### **Flows**

Starting with the second staff draft’s ER P5, then staff draft four and five as ER P1, the Plan speaks to the issue of water flows to serve ecosystem needs. The issue of this cross reference to water supply reliability was discussed above under Chapter 4. Early references to a “hammer” that would fall if flow standards were not adopted by the SWRCB were dropped in favor of suggesting that the Council could consider independent action if flow standards were not adopted for the Delta by 2014, and for the tributaries by 2018.

## **Chapter 6. Improve Water Quality to Protect Human Health and the Environment**

This is one area in which some commenters urge the Council to be more forceful (selectively related to certain interests).

“The Delta Plan should include a description of why there are no water quality policies despite that one of their policy goals laid out in legislation is to improve water quality (CCWD\_093011).

San Joaquin Co. urges a stronger role in ensuring the enforcement of water quality rules regarding agricultural drainage to the San Joaquin River. “DSC also should exert its influence over CVP and SWP to truly enforce water releases for salinity control”. (SJ Co 062411).

Some environmental groups also propose stronger action, suggesting for example that policy should require that covered actions require waste discharge permits (as opposed to waivers) with assurances on pollution reduction. (EWC 032411 pg 5 FN2)

Comments such as this affirmed the Council’s need to address the Delta’s entire watershed, not just the Delta. But, on that issue, above-Delta water users expressed concerns about Chapters 6 and 4, urging that DSC remove its “threat” on water rights permits, and respect the SWRB’s jurisdiction. (RCRC 063011)

Commentators also pointed out how water quality is closely tied to actions covered in other chapters. DWR points out the linkage between water quality, salinity control and the levee system (DWR 050611). Local Agencies of the North Delta (LAND) pointed out the importance of water quality to agriculture; not only as a source of low-saline water, but in agriculture’s responsibility to use sustainable practices in water conservation and pollution control. (LAND 051211)

## **Chapter 7. Reduce Risk to People, Property, and State Interests in the Delta**

Changes in the language of policies and recommendations through development of staff drafts involved clarification of intent and coverage, some reduction of the level of concern about risk, transfer of certain responsibilities from the Council to other agencies, shifting from policies with regulatory effect to advisory recommendations, and the postponement of some actions.

During the development of the staff drafts, the flow of comments tended to remain fairly constant in content, with many of the comments that were raised in response to Staff Drafts 1 and 2 carried forward throughout the process. Comments on Risk can be grouped roughly into two opposing themes. These themes are not necessarily directly aligned with particular stakeholders, but nonetheless formed the bookends of policy development and the shaping of the Plan.

On the one hand, comments urged the Council to take account of the seriousness of potential catastrophic events and the losses at stake. For example, these included such statements as (paraphrased):

- The Delta is inherently flood prone and its most appropriate uses are agriculture, recreation and habitat (quoted from the Delta Protection Act of 1992).
- Lands behind levees are not risk free. (U.S. Army Corps of Engineers (USACE) April 15, 2011). They should require flood insurance, and clear notification to developers and purchasers that they may suffer inundation from levee failure. Comments on Draft 1 reiterated the recommendations of the Strategic Plan about prior notice in real estate transactions, and the marking of flood heights in communities. (American Rivers, March 10, 2011).
- Federal Emergency management Agency (FEMA) levee standards do not account for climate change, sea-level rise or seismicity, and thus should not be relied upon in the Delta.
- Floodplains are critical for both flood relief and ecosystem function and should be broadly protected. This is important even given the fact that floodplains cover vast areas of the Delta. These wide floodplains need policy protection, not just narrower floodways, which are essentially river channels.
- Flood insurance, though important, does not protect against loss of life or provide for emergency access. Moreover, flood insurance can encourage new development in high-risk areas.
- New development in floodplains should establish escrow accounts for levee maintenance. (Amer. Rivers. 4/6/11)

On the other end of the spectrum, comments stressed the difficulties, costs, complexities, and practical implications of any significant attempt to reduce exposure to risk. These included such statements as:

- The level of risk (especially seismic and sea level rise) may be overstated. (LAND September 30, 2011), (CCVFC June 13, 2011).
- The current levee system (with modest funding support) has been effective in recent years and is stronger than some would postulate. (MBK/Cosio September 30, 2011).
- If levee standards are set too high, protection can far exceed foreseeable funding.
- Other agencies such as DWR, USACE, and CVFPB have the requisite technical expertise, and should be deferred to, or at least, solutions should await their studies and plans underway.
- Local governments are closest to the problem and in the best position to balance interests.
- Flood-proofing is a good, cost-effective strategy.

Given this context, the drafts of the Plan evolved on a number of key aspects of risk management, but most importantly on the following:

#### **General expression of the level of risk**

The second staff draft's chapter on risk began with a foundation statement, which as a policy could be invoked as a rationale for regulation and consistency determination under the Plan. Policy RR P2 put

forth the language from the Delta Protection Act of 1992: the Delta "... is an inherently flood prone area ...". The essence of this language does occur in later staff drafts, including staff draft five, but as textual discussion, not policy.

### **Levee Classification and land use**

The second staff draft's policy RR P4 required that covered actions demonstrate compliance with a set of criteria designed to provide a framework for levee and land-use compatibility and the protection of state interests. In staff draft three, policy RR P4 dropped the list of criteria as a separate policy and instead tied it to Table 7-1 (which embodied many but not all of the same criteria).

Table 7-1 (Levee Classification for Covered Actions) is invoked in staff draft five as policy by RR P3. It for the first time sets forth and clarifies State policy in regard to land and resource uses behind Delta levees of varied engineering characteristics. Over the course of drafting, Table 7-1 underwent important changes. For example, the table in staff draft two recognized the shortcomings of the FEMA 100-year standard for application to Delta situations, especially the effects of climate change and seismicity (which FEMA standards ignore). Staff draft two described stronger levees that might temper seismic risk, and would have required them for areas of dense habitation. By staff draft five, FEMA standards are deemed acceptable for small subdivisions anywhere in the Delta, and potentially acceptable (upon study) for Legacy Towns. Proposed DWR 200-year standard levee designs are deemed acceptable for major subdivisions, apparently anywhere in the Delta. The text of Table 7-1 notes that major subdivisions are highly discouraged where they might conflict with agriculture or ecosystem function; but there presumably may be highly promoted developments that will take this language to mean that the Council should balance and compromise on this issue.

### **Levee investment strategy.**

Staff draft two's RR P4 set forth a number of criteria for investment that reflected the range of co-equal goals: delta hydrodynamics, state interests in infrastructure, ecosystem needs, and a requirement to compare investment in levees to other strategies such as flood-proofing of existing development, relocation of infrastructure, and changes in land use. It also would have required that investment priorities be set based upon a Delta-wide comparative benefit-cost analysis.

In staff draft five, some of these broader requirements are listed as recommendations for the "*Framework for DWR Investments in Delta Integrated Flood Management*". This effort, underway by DWR, CVFPB and DSC, will then be considered for incorporation in the Plan by January 1, 2013.

Staff draft five goes on to state that if the *Framework* is not completed by 2013, the Council could adopt its own strategy.

## **Floodproofing**

Comments from local governments and such groups as the California Building Industry Association (CBIA) favored the inclusion of floodproofing as a viable strategy that could be more cost-effective than levee upgrades, and that could facilitate development opportunities. Others (such as American Rivers) stressed that while appropriate for some existing, at-risk communities, floodproofing can encourage development and scattered residences on mounds and stilts, inaccessible in time of flood, and breaking up parcels now in agriculture and habitat.

Staff draft two's RR P2 stated: "... flood-proofing may be used as a strategy of risk reduction, but it shall be regarded as not fully addressing risks to life, or access for emergency response, evacuation, and maintenance". In draft three, that cautionary language was dropped. By staff draft five, text and graphics appear to endorse floodproofing of individual structures via fill, mounds or stilts, noting that use of these techniques to raise living areas above the FEMA 100-year standard avoids the need for flood insurance. Staff draft five thus appears to endorse the FEMA flood standard for the Delta. Staff draft five's Table 7-1 footnote (d) relinquishes the Council's authority on this issue, and delegates the use of flood proofing strategy to local agencies.

## **Summary**

The evolution of the Plan's coverage of risk has gravitated from a significant attempt to reduce exposure toward an accommodation that recognizes the practical implications and political, technical and financial difficulties involved in trying to meet the Act's mandate to reduce exposure to risk (85020 (g)). The problem of existing risk to critical infrastructure, legacy towns and scattered homes and the issue of future development all have been largely forwarded for resolution at a future time certain. Delegation of leadership to the flood management agencies could lead to a levee-centric approach, one that fails to fully include land-use planning to reduce exposure. The seriousness of risk is acknowledged in the text, but not clearly embodied in the policies of staff draft five. Policies linking land and resource uses to levee classification remain in Table 7.1 but in its staff draft five form, it comports with comments that minimize the seriousness of risk and permit development under existing standards that have weak or uncertain capability to resist earthquake or climate change. As Table 7-1 and its supporting policies stand, the relationship between levee type and land use is well established (which is a significant change in state policy). However, the exemptions provided to spheres of influence (especially Stockton and Lathrop), the permission of small subdivisions and new "flood-proof" development, and the allowance of major subdivisions anywhere in the Delta with DWR 200-year standard levees could become difficult issues in the near future.

## **Chapter 8. Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the Delta as an Evolving Place**

Chapter 8 underwent a significant modification between the second and third staff drafts, at which point the Plan shifted away from policies and toward recommendations that rely on other regional and local agencies with Delta-oriented missions to satisfy responsibilities under the Act.

### **Shift from Policies to Recommendations**

Staff draft two contained two policies that would have placed requirements on plans and other covered actions coming before the Council for certification. Policy DP P1 required the Delta Protection Commission's Economic Sustainability Plan to cover public safety, including flood protection for existing legacy towns and infrastructure. Policy DP P2 provided that covered actions related to Legacy Towns would have to be deemed consistent with strategies for protection and preservation of these towns. The strategies would have been developed by DPC for possible incorporation into the Delta Plan.

These policies (that is, all policies) were dropped in staff draft three, with similar language restated in staff draft three and all later drafts as recommendations. Staff drafts three and later also contain numerous suggestions for state and local agencies.

The shift from policy to recommendations is not easily related to specific comments. However, this shift does comport with a number of points in the "Alternate Delta Plan" (Association of California Water Agencies June 10, 2011), which proposes strong reliance on the Delta Protection Commission and local governments. Of note, the Alternate Delta Plan supports the Council's role in certification so as to represent broader and state-wide interests, but this admonition is not reflected in staff drafts four and later.

The shift also comports with the stated comments of the Delta Protection Commission and Delta Conservancy in regard to preserving their authority and responsibility for the subject matter of Chapter 8 (Delta Conservancy 093011). The shift also responds to concerns of local agencies such as Yolo County (Yolo County 041211).

### **The thrust of Chapter 8 vs. all other elements of the Delta Plan**

Implementation of the language and recommendations of Chapter 8 of the Fifth Staff Draft will lead to conflict with other elements of the Delta Plan. The Department of Water Resources states:

" ... some of the policies and recommendations in Chapter 8 (particularly those related to legacy towns in the Primary Zone) may be in direct conflict with some of the policies/recommendations in Chapter 7 (particularly any growth-inducing effects of investments in levees protecting legacy towns.) Note that the Delta Protection Act of 1992 allows these communities to grow in accordance with "special area plans" adopted by the Counties. These plans are subject to CEQA review for growth-inducing impacts, transportation issues, and other impacts. The issue of

"economic sustainability of legacy towns" is a complex issue. By allowing legacy towns to grow (in order to sustain schools, postal services, and other services) increases flood risk and consequences. This is a prime example of where the Council will need to be clear about how conflicting "non-co-equal goal" policies and recommendations will be prioritized." (DWR 050611).

The issue of how Delta-specific plans comport with the full range of mandates in the Act will emerge as the Council reviews the Economic Sustainability Plan and local government plans for consistency with the entire Plan.

### **Tone**

There were comments to the effect that like Chapter 7, early staff drafts of this chapter painted too dire a picture.

One of: "... a patient on life support, without even identifying remedies ...". Citing the Delta's many positive attributes (marinas, ferries, festivals) this same organization cries: "Shame, shame, shame! How can the Council protect and enhance values it does not even recognize ...?" (NDWA 053111).

Successive staff drafts are responsive to this issue of tone. The fifth staff draft includes several pages describing the Delta's history, communities, and activities and a single seven line paragraph suggesting risks to the current uses of the Delta (page 194, lines 25-31)

### **Economic Sustainability Plan**

Much of the substance of Delta management is expected to be embodied in this plan.

The Public Draft Economic Sustainability Plan for the Sacramento-San Joaquin Delta, October 10, 2011 has now been released. This report appears to address all of the topics recommended by draft five. The degree to which it comports with the entire Delta Plan is beyond the scope of this report, and will need to be determined by the Council.

### **Chapter 9. Finance Plan Framework to Support Coequal Goals**

As seen in Table 1, no version of the staff drafts included a policy or performance measure in this chapter. The number of recommendations fluctuated around a dozen, with 13 recommendations included in the fifth staff draft. Somewhat differently than in other chapters, the recommendations in the second staff draft Delta Plan were mostly conceptual, with the third staff draft being considerably more specific. The fourth refined the specifics of recommendations and adopted the categories of recommendations which continued in the fifth staff draft. That last staff draft includes additional refinement of recommendations and adds one new recommendation, FP R10 urging the legislature "...

to consider appropriate funding for implementation of the Economic Sustainability Plan consistent with the Delta Plan.”

If implemented, the recommendations included in the fifth staff draft Delta Plan appear to provide an improved funding system for flood management and prevention (recommendations FP R1, R2 and R3), critical fee authority and revenue bond authority for the Delta Stewardship Council (FP R6), funding for the Delta Conservancy (FP R8 and R9), enhanced revenue raising or replacement revenues for local governments (FP R7, FP R10 and R11), a non-bond funding source for public ecosystem restoration costs (FP R12), and improved information on which to make financial decisions (FP R5 and FP R13).

The comments received on this chapter emphasized two complaints: the projected funding for the Council was too large and/or not well justified and the costs incurred will be large and should not fall on [whoever is making the comment]. The last category included both those noting direct costs imposed on agencies by the Delta Plan and also the impact of stressor-pay fees on agencies. While the analysis of themes in comments (November 8, 2011) only identified the two themes below as directly related to financial issues, comments on finances were more numerous than this suggests. In specific, agencies in addition to DWR commented on costs to conform activities to the Delta Plan.

The Delta Plan should have a limited reach and address any impacts on direct Delta users and land owners.

The Delta Plan should not negatively impact the operations and contracting processes of the Department of Water Resources (DWR).

As in other chapters, there are not clear links between comments received and the evolution of the staff drafts of the Delta Plan.

## **Summary of chapter analyses**

The chapter analyses above suggest summary comments regarding development of policies, recommendations and performance measures in the five staff draft Delta plans:

- The staff drafts include policies and recommendations addressing major features of a Delta Plan required under the Delta Reform Act of 2009.
- The second staff draft Delta Plan expressed the most direct exercise of Council authority; subsequent drafts sought to fulfill the Council’s responsibilities less directly, relying more on the actions of other agencies, usually under existing legislation, policies and programs. These patterns are most visible in chapters 3 (governance), 4 (more reliable water supply), and 7 (risk reduction).



- Reliance on the actions of other agencies ensures continuing conflicts between the missions of and resource allocations by those agencies with the requirements of the Delta Reform Act of 2009 as incorporated into the staff draft Delta Plans. This conflict is inherent in the indirect authority in the Act, but heavy reliance on other agencies in the fifth staff draft Delta Plan brings this into sharp focus as seen in the comments on the fifth draft by DWR (September 30, 2011).
- The fifth staff draft Delta Plan leaves unresolved a number of conflicts among its provisions, most visibly between recommendations and performance measures in Chapter 8, (Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the Delta as an Evolving Place) versus chapters 4 (more reliable supply), 5 (ecosystem restoration), and 7 (risk reduction).
- Policies, recommendations, and performance measures are almost exclusively focused on single goals (e.g., reliable water supply) with few evident provisions for integration or resolving conflicts among these single focus elements.

### 3. BROADER THEMES

This section builds on the analyses of chapters above but also goes beyond policies, recommendations and performance measures to consider text, graphics and tables. Identifying broader themes requires perception of meaning, interpretation of relationships and judgment about the probable consequences of multiple elements of the Delta Plan in a complex and changing world. The effort here does not attempt to go to a level of specificity required for an environmental impact analysis but rather to catch broad themes of importance. There are, inevitably, differences in the perceptions, interpretations, and judgments regarding a document as complex as the fifth staff draft Plan, but advancing these themes and related thinking provides a basis for discussion and improvement.

#### **The evolution of staff drafts reflect common challenges in launching a new agency and policy**

As noted in the analysis of comments on the staff drafts of November 8, 2011, any new agency charged with implementing a new policy undertakes its charge in a complex context which include:

- diverse understandings of relevant physical, biological and human created systems and their future dynamics,
- focused activities (private and public) (examples include agriculture, manufacturing, ports, and water conveyance, distribution and use),
- specialized interests (public and private) (examples include ecosystem function, transportation, in Delta water use, watershed water use, local and/or state wide economic sustainability and growth),

- constrained organizational missions and mandates (private and public),
- public policies (statutes, regulations and legal decisions), plans (local government general plans, long term capital plans), and programs or projects (levee subventions, ecosystem restoration, pump intake screening)
- conflicts, both active and dormant, some with historically solidified positions,
- expectations regarding future land uses,
- accommodations and alliances among actors, and
- preferred arenas for resolving conflicts.

The comments received on staff draft Delta Plans have revealed each of these dimensions and the evolving staff drafts can be interpreted as gaining length, complexity and conditionality in response to the surfacing of such factors.

- ✓ Different understandings were addressed by providing more information in the drafts, so they lengthen and become more specific.
- ✓ As the staff drafts were released and seen as relevant to more activities, interests or organizations, the comments generated led to responses to explain, accommodate or exclude, among other possible changes to the staff drafts.
- ✓ Interdependencies and/or conflicts with existing public policies become more apparent and were acknowledged, accommodated or addressed in some way.
- ✓ Conflicts became more focused on specific provisions in the staff drafts and often intensified, resulting in changes to subsequent staff drafts intended to minimize or otherwise manage conflicts.
- ✓ Previous accommodations among actors were threatened by the staff drafts, generating assertions that prior decisions or practices cannot be upset, so decisions were made on whether and how to respond with a possible revision in the next staff draft.
- ✓ Additional conflicts emerged over preferred arenas for making decisions and resolving conflicts—what decisions should be the responsibility of the Council vs. local governments, the SWRCB, or others?

Given these dynamics, the increasing length of each staff draft noted at the beginning of this analysis is not surprising. In addition to length, the documents add specifics, the meaning of which is important to some, a mystery to many, and time consuming to digest for all. These dynamics make it very challenging to produce a coherent Delta Plan. Conflicts among elements arise. Clarity of purpose is obscured.

## What the Fifth Staff Draft Delta Plan suggests regarding the Council's work

It may be useful to step back and view the entire set of drafts and the full stream of comments in terms of four dimensions of the fifth staff draft Delta Plan and the Council's ability to use such a Delta Plan as the basis for fulfilling its responsibilities. The dimensions can be portrayed with bookends and the work of the Council suggested by chapter numbers placed loosely at points between those bookends. It is not the intent of this interpretation to infer that either extreme position shown below is necessarily to be preferred. The conclusions and "assignments" of chapters to locations on the sliding scales below are inferences that could be confirmed or altered with further discussion.

1. **Authority:** the degree to which the Council asserts its authority through direct enforcement vs. forwarding or deferring to the determinations of others. Across Chapters 4 through 8, the fifth staff draft Delta Plan as a whole leans heavily away from enforcement and toward an advisory role for Council, at least until the Plan is updated.

Advisory / Collaborative	Ch 8		Ch 4				Definitive / Enforceable
	Ch 7 (levee investment)				Ch 7 (Table 7)		

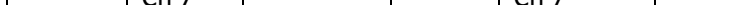
In explanation of the graphic above, **Chapter 4** (reliable water supply) awaits results from the State Water Resources Control Board, but does promise fuller use of its own authority if the SWRCB fails to act.

**Chapter 7's** (risk reduction) Table 7-1 not only provides advice for both levee engineering and land use planning, but also provides the Council with a mechanism for passive review in consistency determination. However, creative solutions to risk reduction are forwarded to the Department of Water Resources for engineering-based levee-centric planning. The first staff draft's coverage of a broadly based levee investment strategy was dropped in favor of delegation of this task to DWR. staff draft five contains no mechanism for the affirmative bridging of levee investment with land and resource planning and regulation that could prevent further increases in exposure to loss, or reduce the current level of exposure.

**Chapter 8** (Delta as an evolving place) contains many recommendations, but largely forwards consideration of, and planning for, the Delta as an evolving place to local and regional agencies.

- |                 |      |      |  |  |  |  |   |
|-----------------|------|------|--|--|--|--|---|
| Plan as Process | Ch 2 | Ch 5 |  |  |  |  | Plan as Pre-statement or fixed outcomes |
|-----------------|------|------|--|--|--|--|---|

**Chapter 5** (ecosystem restoration) initially referred to maps that identified broad areas that may be needed for ecosystem restoration in the near and distant future. However, without more definitive location of target areas, the fifth staff draft softened the reference to provide for consultation with environmental agencies when impinging upon designated zones.

- |   |  |                      |      |  |                    |  |                                     |
|---|--|----------------------|------|--|--------------------|--|-------------------------------------|
| On hold for other's plans or further work | Ch 2   |                      | Ch 5 |  |                    |  | In effect upon adoption of the Plan |
|   |  |                      |      |  |                    |  |                                     |
|   |  | Ch 7<br>(as a whole) |      |  | Ch 7<br>(Table7-1) |  |                                     |

**Chapter 7's** Table 7-1 will take effect upon adoption, but parts of that table and much of the rest of the chapter depend upon work yet to be completed by DWR and flood management agencies.

**4. Rationale:** the basis of support for policies and recommendations.

Professional practice & management / Incremental	Ch 7				Ch 5	Ch 2	Science based / rational & comprehensive
	Ch 8						

**Chapter 2** is almost exclusively science-based and suggests that the Plan (and covered actions) should be highly reliant on peer-reviewed research and quantitative modeling. However, this chapter includes no policies and gives little attention to how the ideas advanced could be made operational. Adaptive management is seen primarily from a scientist's point of view, covering only the science half of the Adaptive Management equation. That is, the chapter is strong on the issue of uncertainty and the need for monitoring and adaptation, but weak on the issue of management and implementation. Injection of science and adaptive management to key decisions and day-to-day management is yet to be accomplished. Case studies of large-scale restoration programs described in the chapter are instructive, but none are examples of large-scale application of active adaptive management. Submitted comments make the point that it is still unclear to commentators how they can follow the advice given in Chapter 2 in the practical application to their plans and actions.

**Chapter 5** has a strong science base, but the issue of water management as it relates to ecosystem function is still based mainly upon management experience and expertise.

**Chapter 8** is indeed being supported by economic research, but it depends heavily on the extensive experience of the Delta community. Changes to the Delta envisioned in this chapter are very minor and would be taken, if at all, in small trial-and-error steps. Calls for major shifts that would respond to warnings from the science community on seismic risk and sea-level rise are noted, but response is clearly muted and incremental.

**The fifth staff draft Delta Plan conveys a particular framing of problems and possible actions**

The Delta Reform Act of 2009 is ambitious legislation, seeking to address issues of great importance to the State about which there is conflict regarding causes and remedies, as well as conflicting end goals. These issues are all embedded in differing values and are commonly addressed in some form by existing policies and programs. However, The Delta Reform Act anticipated "... fundamental reorganization of the state's management of Delta watershed resources." (Water Code section 85001(a)) This reflects a judgment that existing public policies, programs and associated institutions yield inadequate progress in addressing the problems, even when agencies have relevant authority and resources. Policy analysts identify policy choices characterized by these attributes variously, including as "wicked problems" or

requiring “institutional” design. They further suggest that these problems cannot be addressed by seeking “optimal” or even “stable” solutions within existing institutions. Instead, the advice to those seeking to make progress on these problems includes:<sup>1</sup>

- Developing shared information
- Framing issues and policy choices for effective action
- Establishing an institutional structure which provide rules and incentives supporting desired behaviors
- Strategic policy choices, which leverage effects, afford opportunities to learn, and (preferably) can be reversed if proven not to have desired outcomes
- Robust processes for monitoring, assessing and revising programs and policies

Interpreting the evolution of staff drafts from this perspective is suggestive of these points.

First, the substantial expansion in length of the drafts over time appears to be an attempt to create a basis of shared information in an area where there are significant gaps in information and important disagreements about “facts.” Similarly, the role of the science program in developing shared information is recognized (e.g., fifth staff draft Delta Plan, pages 44-48).

Second, over time, the staff drafts have increasingly framed the Delta Plan in terms congruent with the interpretation of the water community. This is most noticeable in the Plan’s setting the very contentious issue of establishing flow standards as a formal policy requirement of ecosystem restoration solely. This choice was made despite the explicit recognition of the importance of this issue to improving reliability of water supplies, as suggested by this statement in the chapter 4, A More Reliable Water Supply for California, fifth staff draft Delta Plan, page 86:

*“The State cannot effectively plan, finance, and build new conveyance and storage facilities to improve reliability of water exports from the Delta watershed when future Bay-Delta Water Quality Control Plan objectives and flow requirements are not known.”*

While perhaps not intended, Chapter 1 of the fifth staff draft Delta Plan also contributes to framing the issue as water supply vs. species protection. A full page “pullout” on species protection policies is provided as the major visible section (and approximately half of the allotted page space) of the

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<sup>1</sup>. Among examples of such approaches are: Donald A. Schon, (1973) *Beyond the Stable State. Public and private learning in a changing society*; Donald A. Schon and Martin Rein (1994) *Frame Reflection: Toward resolution of intractable policy controversies*; Giandomenico Majone (2005) *Dilemmas of European Integration: The ambiguities and pitfalls of integration by stealth*; Chris Argyris and Donald A. Schon (1996) *Organizational Learning II*; Charles E. Lindblom (2001) *The Market System: What It Is, how It works, and what to make of it*; Elinor Ostrom (2005) *Understanding Institutional Diversity*; James G. March and Johan P. Olsen (1995) *Democratic Governance*.

discussion of the heading “The Advent of Uncertainty: California’s Water Supply Reliability.” (pages 17, 19, 20; page 18 is a map of the legal Delta and the pullout is page 19, while pages 18 and 20 are partial pages) A more complete discussion of factors affecting water supply reliability is in Chapter 4, (A More Reliable Water Supply for California) including a full page pullout conveying a much more nuanced framing of the issue (page 68). However, the initial framing is important.

Third, the Delta Reform Act of 2009 provides for weak institutional change as it results directly in little change in the rules and/or incentives related to achieving its policy objectives. The enumeration of acts which are not affected by this statute illustrates this point (Water Code section 85031). The responsibility to adopt the Delta Plan affords some opportunities and the staff drafts have preserved regulatory powers, effectively allowing some rule making and implementation through the covered action consistency review processes. The extent to which the adopted Delta Plan incorporates effective covered actions and consistency review requirements is critical to institutional change. If the processes established in chapter 3 (governance) are the foundation for institutional change, the scope and direction of that change are set in chapters 4 through 8, dealing with substantive policies. As noted in the analyses above, these chapters include few policies and transfer responsibility to other agencies for leadership, priorities, resources and actions.

Fourth, the range of strategies available for use in the Delta Plan is limited by the underlying statute. The policies and recommendations that seek to build on existing policies is an illustration of seeking leverage, seen for example in adding a water sustainability element to existing water management plans. If effective, setting time frames for completion of policy making by other agencies can accelerate some long delayed public policy processes. If adopted and successful, some recommendations regarding improved information could shift decision premises and processes of multiple agencies and private actors, with substantial effect. Other possibilities for leveraging may exist and could be explored for the sixth staff draft or in future revisions to the Delta Plan.

Fifth, processes for “policy learning” over time are critical. The staff draft Delta Plans include extensive discussion of adaptive management as a process. However, as noted in comments from the Delta Independent Science Board, the fifth staff draft Delta Plan does not include much discussion of how the proposed processes are to be carried forward in terms of the specific goals of the Act and the policies or recommendations included in that draft. Moreover, the goal of adaptive management must be actual change in programs and policies, and, in some instance, recommendations for statutory change. The current discussion of adaptive management provides little suggestion on what would overcome the strong barriers to change of any existing practice and how programs or policies would or should be changed to effectuate the co-equal goals.

## **The opportunities and challenges of performance measures**

Performance measures and targets are required by Water Code sections 85211 and 85308. As shown above in Table 1, chapters 4 through 8 of the fifth staff draft Delta Plan include performance measures, including target dates for many administrative performance measures and a “progress” expectation for many driver and outcome measures. Performance measures and targets used effectively can serve both to encourage accountability and to inform the adaptive management required under Water Code sections 85308(f) and 85302. Performance measures can be most effective not simply as in a report card, but when they not only signal the need for change but trigger an appropriate response. To perform this function, a performance measure must be linked to a specific policy that effectuates adaptation.

Performance measures can also be used as the basis of regulation, where progress toward a target triggers one or another consequence. However, none of the performance measures included in the fifth staff draft Delta Plan appear to have regulatory effect, in that they are not linked to policies as triggers for actions.

A critical issue regarding performance measures is whether they are based in achieving the goals of the Delta Reform Act of 2009 vs. the goals of the particular policies and recommendations of the adopted Delta Plan. If the performance measures are derived from the Act, they allow effective policy “learning” of the type described above through adaptive management processes. Structured in this manner, the assessment of success is whether or not the adopted policy or recommendation achieves the goals inherent in the Act. If the performance measures are instead defined by the policy alone, the question becomes much narrower. The distinction made among administrative, driver and outcome performance measures made in the fourth and fifth staff drafts is a useful basis on which to build, but caution must be exercised to avoid an over focus on administrative performance measures. Most critically, the performance measures should not be narrowed to administrative or driver measures tied to specific policies or recommendations in an adopted Delta Plan, but rather, they should be tied to the goals of the Act.

The Act provides a good foundation upon which to build performance measures. For example, it specifies particular goals in sufficient detail to suggest closely linked performance measures (e.g., Water Code sections 85201, 85302(d), 85303, 85304, and 85211(b) regarding a more reliable water supply for California, or Water Code sections 85022(d)(5)(6); 85302(c) and 85302(e)). In other areas, the Act is not so specific, as seen in provisions on risk reduction (Water Code sections (85305(1)(b), 85306, and 85307) or regarding the Delta as an evolving place (Public Resources Code section 29702, amended 2009, Water Code sections 85020(a)(b)(h), 85301).

The performance measures included in the fifth staff draft Delta Plan illustrate the basic challenge of achieving integrated action or appropriate trade-offs among policy goals specific in the Act which will find concrete expression in an adopted Delta Plan. Because performance measures are more specific



than policies or recommendations and sometimes quantifiable, they more directly reveal conflicts among policies and recommendations.

In a number of instances, performance measures in one chapter conflict with the goals and measures in another, but the degree to which this may occur is not easy to discern at this point. The EIR may offer some analysis to help in this regard, but its requirement to report impacts as listed in CEQA does not provide a direct analysis of cross-goal interactions between the chapters of the Delta Plan.

For example: Chapter 8's Driver Performance Measure: *"Progress toward meeting the DPC's Economic Sustainability Plan recommendations ..."* is questionable, in that the ESP is not yet finalized or compared to the Delta Plan as a whole, and has yet to be considered for consistency. But the Economic Sustainability Plan is likely to be a forcing factor at odds with some ecosystem restoration, water supply, and water quality actions.

Chapter 8's Driver: *"Progress toward improving the economic sustainability of Delta land uses and protection of the Delta's agricultural values. Total agricultural acreage and gross revenue in the Delta will be maintained or increased in the future."* also appears on its face to conflict with what can be expected from implementation of ecosystem restoration programs or improved water conveyance.

Similarly, Chapter 8's Outcome Measure on tourism and recreation may be linked to the ESP and other local plans' expectations for development in legacy towns, which could conflict with Chapter 7's performance measure on decreasing Expected Annual Damage.

Such interconnections in performance measures across chapters raise the question of how the Council intends to choose between goals when they conflict. As the Delta Independent Science Board pointed out, the Draft's individual chapters and performance measures imply that all can be achieved as separate activities. This is not likely, and the text of the Plan appropriately recognizes links among activities as seen, for example, in the discussion of "The California Water Picture" and "The Delta and California's Water Supply" in the fifth staff draft Delta Plan (pages 69-78)

Assessment of performance may be the first, and in some cases the only point at which intra-plan conflicts become crystallized. Should the Plan contain further recognition of the likelihood of conflict? Should the plan give further guidance on how cross-goal conflicts can be illuminated for the Council's evaluation?

Chapter 5's Administrative Measure anticipating a "regional ecosystem assessment and communication tool" is an example of how a mechanism for performance measurement useful for several policy goals can be built. It may be that similar mechanisms to assess progress on multiple performance measures will be needed to support the Council in understanding progress toward achieving the several disparate goals of the Act and successfully fulfilling the requirements for adaptive management.